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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BROWN, JAYME L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,549

Applicant(s)

DI SANTE ET AL.

Examiner

Jayme L. Brown

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17 and 21-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The new rejections presented below were made in light of the newly found prior art. It is noted that the newly cited art (U.S. Patent 4,034,137) was cited in the parent file SN 09/973667 in the European Search Report submitted on 3/12/04, however it was NOT cited by Applicants in the instant Application. Applicant is reminded of their duty to disclose to the Office all information known to be material to patentability as defined in 37 CFR 1.56.

Election/Restrictions

2. Applicant's election without traverse of Group I, claims 17 and 21-34 in the reply filed on 12/12/05 is acknowledged.

Drawings

3. The drawings are objected to because in Figures 1, 2, and 3, "VLIES" should be changed to - - FLEECE - -. **Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.** Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several

views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:

On page 6, line 2, change "vlies" to - - fleece - -.

On page 8, line 9, change "vlies" to - - fleece - -.

On page 11, line 23, change "vlies" to - - fleece - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claims 17 and 21-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Regarding claim 17, in line 9, (C) is "a layer of glass fibre", but in lines 18-20, (C) is "a layer of glass fibre, natural fibre or a combination of glass fibre and natural

Art Unit: 1733

fibre". It is confusing as to whether the first layer (C) is supposed to be different than the second one. It is recommended that in line 9, "a layer of glass fibre (C)" be changed to - - a layer of glass fibre, natural fibre or a combination of glass fibre and natural fibre (C) - -.

b. Regarding claim 21, as stated in the Office Action dated 8/8/05, "a (B)(A)(B)(C)(B)(A)(B) structure" should be changed to - - a (C)(B)(A)(B)(C)(B)(A)(B)(C) structure - - so that it is the same structure as in claim 17.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17, 21-23, 25-26, 29-31, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerer et al. (U.S. Patent 5,089,328).

Regarding claim 17, Doerer et al. discloses a method of providing a car interior with a multilayer product wherein the multilayer product comprises: a first element wherein the first element consists of: a layer of spongy semi-rigid polymer (A) (14'), impregnated on one or both sides with polyurethane resin (B), and a layer of glass fibre (C) (22') on either side of polymer (A) impregnated with resin (B); a second element coupled to the first element, wherein the second element comprises: a layer of spongy semi-rigid polymer (A) (16') impregnated on one or both sides with polyurethane resin

Art Unit: 1733

(B); and an additional layer of glass fibre, natural fibre or a combination of glass fibre and natural fibre (C) (18') (Column 1, lines 4-9; Column 2, line 65 – Column 3, line 47; Column 4, lines 3-40; Column 5, lines 7-11; Figure 3).

Doerer et al. is silent toward the step of installing the multilayer product in the car interior. One skilled in the art would have readily appreciated that it is conventional in the art to install automobile linings in automobiles, since such is their intended purpose. One skilled in the art would also have readily recognized installing such linings in an automobile as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to install the multilayer product in the car interior in the method of Doerer et al. since it is known and conventional in the art to do so.

Regarding claim 21, Doerer et al. teaches a (B)(A)(B)(C)(B)(A)(B) structure wherein A, B, and C have the meanings defined in claim 17, and optionally other elements consisting of the layers (A), (B), and (C) are added to the outer sides of the structure, with the alternation specified above, with different alternations or with a combination of said alterations above and with different alterations (Figure 3).

Regarding claim 22, Doerer et al. teaches that the spongy, semi-rigid polymer is selected from the group consisting of polyurethane, polystyrene, and polyester (Column 3, lines 25-30).

Regarding claim 23, Doerer et al. teaches that the spongy, semi-rigid polymer is polyurethane (Column 3, lines 25-30).

Regarding claim 25, Doerer et al. teaches that the spongy, semi-rigid polymer which forms layer (A) is the same polymer in all the (A) layers (Column 7, lines 33-39).

Regarding claim 26, Doerer et al. teaches that the spongy, semi-rigid polymer which forms layer (A) is a polymer having different densities in the various (A) layers (Figure 3).

Regarding claim 29, Doerer et al. teaches that both external sides of said multilayer product or only one side of said multilayer product comprises lining fabric or layers of anti-vibration material (Figure 3).

Regarding claim 30, Doerer et al. teaches that the thickness of layer (A) varies from 4 to 18 mm (Column 7, lines 33-39).

Regarding claim 31, Doerer et al. teaches that the thickness of layer (A) varies from 5 to 7 mm (Column 3, lines 58-60; Column 4, lines 9-11 and 20-21; Column 7, lines 33-39).

Regarding claim 33, Doerer et al. teaches that the layers (A) of spongy, semi-rigid polymer have the same thickness (Column 3, lines 58-60; Column 4, lines 9-11 and 20-21).

Regarding claim 34, Doerer et al. teaches that the layers (A) of spongy, semi-rigid polymer have different thicknesses (Figure 3).

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doerer et al. (U.S. Patent 5,089,328) in view of Ishii et al. (U.S. Patent 4,938,819).

Doerer et al. is relied upon for the teachings above. Doerer et al. is silent toward the spongy, semi-rigid polymer having a density ranging from 20 to 40 kg/m³. Ishii et al.

Art Unit: 1733

is directed to making a composite panel of a foam material and teaches having a polyurethane foam sheet with a density of 31 kg/m^3 .

One skilled in the art would have readily appreciated choosing a density that best suits the application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the polyurethane have a density ranging from 20 to 40 kg/m^3 in the method of Doerer et al. as suggested by Ishii et al. since it is known and conventional in the art.

9. Claims 27, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerer et al. (U.S. Patent 5,089,328) in view of Stevens et al. (U.S. Patent 5,976,646).

Regarding claim 27, Doerer et al. is relied upon for the teachings above. Doerer et al. is silent toward the glass fibre being substituted for jute, sisal, coir or other natural materials.

Stevens et al. is directed to vehicle trim panels made of natural fibers such as hemp, abaca, sisal, or flax (Abstract; Column 2, lines 48-51). One skilled in the art would have readily appreciated using natural fibers instead of glass fibers, since glass fibers may sometimes cause skin irritation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use natural fibers, such as sisal, instead of the glass fibers in the method of Doerer et al. as suggested by Stevens et al. in order to prevent skin irritation.

Regarding claim 28, Doerer et al. and Stevens et al. are relied upon for the teachings above. Doerer et al. is silent toward the coupling on both the outer sides of the coupled elements of layers of light fabrics, covering fleece or a combination of layers of light fabric and covering fleece (D), obtaining a product with the structure (D)(C)(B)(A)(B)(C)(B)(A)(B)(C)(D).

Stevens et al. teaches having a decorative fabric outer layer (22) and a scrim layer (30) made of polyester or rayon non-woven material (Column 2, lines 34-41; Figure 2). One skilled in the art would have readily appreciated having layers of light fabrics on the outsides since it is known in the headliner art to do so. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have layers of light fabrics on the outer sides of the coupled elements in the method of Doerer et al. as suggested by Stevens et al. since it is known and conventional in the headliner art.

Regarding claim 32, Doerer et al. is relied upon for the teachings above. Doerer et al. is silent toward the thickness of layer (A) being equal to 6 mm. One skilled in the art would have readily appreciated choosing the appropriate thickness that works best with where the headliner is to be positioned in the vehicle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have layer (A) with a thickness of 6 mm in the method of Doerer et al. to obtain the desired results from the headliner.

Art Unit: 1733

10. Claims 17, 21-23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hofer (U.S. Patent 4,034,137) in view of Satterfield et al. (U.S. Patent 5,007,976).

Regarding claim 17, Hofer teaches a method of providing a car interior with a multilayer product wherein the multilayer product comprises: a first element wherein the first element consists of: a layer of spongy semi-rigid polymer (A) (8), impregnated on one or both sides with resin (B), and a layer of glass fibre (C) (14, 22) on either side of polymer (A) impregnated with resin (B); a second element coupled to the first element, wherein the second element comprises: a layer of spongy semi-rigid polymer (A) (6) impregnated on one or both sides with resin (B); and an additional layer of glass fibre, natural fibre or a combination of glass fibre and natural fibre (C) (20) (Column 1, lines 13-18; Column 3, line 54 – Column 4, line 63; Column 6, lines 38-40; Figure 1).

Hofer is silent toward the resin being polyurethane, but teaches that the liquid thermosetting resin can be any of those well known in the art for making automobile bodies (Column 4, lines 57-58). Hofer is also silent toward the step of installing the multilayer product in the car interior.

Satterfield et al. is directed to making a headliner that is mounted in the passenger compartment of a vehicle and teaches impregnating several layers of the headliner with polyurethane (Abstract; Column 3, lines 16-17). Also, one skilled in the art would have readily appreciated that it is conventional in the art to install automobile linings in automobiles, since such is their intended purpose. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a

Art Unit: 1733

polyurethane resin and to install the multilayer product in the car interior in the method of Hofer as suggested by Satterfield et al. since it is known and conventional in the headliner art.

Regarding claim 21, Hofer teaches a (B)(A)(B)(C)(B)(A)(B) structure wherein A, B, and C have the meanings defined in claim 17, and optionally other elements consisting of the layers (A), (B), and (C) are added to the outer sides of the structure, with the alternation specified above, with different alternations or with a combination of said alterations above and with different alterations (Figure 1).

Regarding claim 22, Hofer teaches that the spongy, semi-rigid polymer is selected from the group consisting of polyurethane, polystyrene, and polyester (Column 3, lines 56-57).

Regarding claim 23, Hofer teaches that the spongy, semi-rigid polymer is polyurethane (Column 3, lines 56-57).

Regarding claim 25, Hofer teaches that the spongy, semi-rigid polymer which forms layer (A) is the same polymer in all the (A) layers (Column 3, lines 56-57).

Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jayme L. Brown** whose telephone number is **571-272-8386**. The examiner can normally be reached on M-F.

Art Unit: 1733

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jayme L. Brown


GLADYS J.P. CORCORAN
PRIMARY EXAMINER